

## ***Micromolding polydimethylsiloxane (PDMS) microfluidic devices.***

- 1) Pour 15–17 g of PDMS pre-polymer per 3" master into a weigh boat. Tare the scale and pour in the curing agent. The amount of curing agent should be 1/10 the pre-polymer weight.
- 2) Mix with a plastic fork for 5 minutes.
- 3) Place in the desiccator until bubbles are gone. This may require several (5–10) cycles of the following actions: Pumping down the desiccator, turning the vacuum off, and venting.
- 4) Place the masters in Petri dishes and pour the PDMS mixture over each. Place the Petri dishes on a hotplate and set for 2.5 hours at 80 °C. Use the AUTO OFF feature.
- 5) Once the PDMS is cured, carefully remove the PDMS and wafer from the Petri dish with a chemical spatula. Use the spatula to separate the PDMS from the Petri dish edges and then carefully pry the PDMS and wafer out.
- 6) Cut the wafer out of the PDMS by running a sharp blade around the edge of the wafer.
- 7) Peel the PDMS off of the wafer. (Or are you really peeling the wafer off of the PDMS? ;-)).
- 8) Bond PDMS to your substrate.

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Prepared for the Tiny Biotools Lab

## **Change log**